



Attorney Docket No. 003364P048

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Patent Application of:

Ho-Jin Kweon, et al.

Serial No. 09/579,576

Filed: May 25, 2000

For: POSITIVE ACTIVE MATERIAL
COMPOSITION FOR
RECHARGEABLE LITHIUM
BATTERY AND METHOD OF
PREPARING POSITIVE ELECTRODE
USING SAME

Examiner: Wills, Monique M.

Art Unit: 1745

Confirmation No.: 7384

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AMENDMENT AND RESPONSE TO OFFICE ACTION

Box Amendment – No Fee
Commissioner for Patents
Washington, D.C. 20231-9998

Dear Sir:

In response to the Office Action mailed January 3, 2003, please amend the above-identified application as follows, and consider the following remarks.

IN THE CLAIMS

Please amend the claims as follows.

10. (Amended) The positive active material composition of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



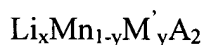
where $1.0 \leq x \leq 1.1$, and A is selected from O, F, S or P.

11. (Amended) The positive active material composition of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq z \leq 0.5$, and A is selected from O, F, S or P.

12. (Amended) The positive active material composition of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



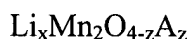
where $1.0 \leq x \leq 1.1$, $0.01 \leq y \leq 0.1$, M' is at least one transition metal or lanthanide metal selected from the group consisting of Al, Cr, Co, Mg, La, Ce, Sr and V, and A is selected from O, F, S or P.

13. (Amended) The positive active material composition of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



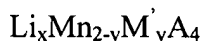
where $1.0 \leq x \leq 1.1$, and A is selected from O, F, S or P.

14. (Amended) The positive active material composition of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq z \leq 0.5$, and A is selected from O, F, S or P.

15. (Amended) The positive active material composition of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq y \leq 0.1$, M' is at least one transition metal or lanthanide metal selected from the group consisting of Al, Cr, Co, Mg, La, Ce, Sr and V, and A is selected from O, F, S or P.

16. (Amended) The positive active material composition of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, A is selected from O, F, S or P, and B is Ni or Co.

17. (Amended) The positive active material composition of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



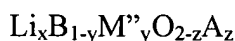
where $1.0 \leq x \leq 1.1$, $0.01 \leq z \leq 0.5$, A is selected from O, F, S or P, and B is Ni or Co.

18. (Amended) The positive active material composition of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq y \leq 0.1$, M'' is at least one transition metal or lanthanide metal selected from the group consisting of Al, Cr, Mn, Fe, Mg, La, Ce, Sr and V, and A is selected from O, F, S or P.

19. (Amended) The positive active material composition of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq y \leq 0.1$, $0.01 \leq z \leq 0.5$, M'' is at least one transition metal or lanthanide metal selected from the group consisting of Al, Cr, Mn, Fe, Mg, La, Ce, Sr and V, A is selected from O, F, S or P, and B is Ni or Co.

20. (Amended) The positive active material composition of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



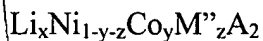
where $1.0 \leq x \leq 1.1$, and A is selected from O, F, S or P.

21. (Amended) The positive active material composition of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq z \leq 0.5$, and A is selected from O, F, S or P.

22. (Amended) The positive active material composition of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq y \leq 0.1$, $0.01 \leq z \leq 0.5$, M'' is at least one transition metal or lanthanide metal selected from the group consisting of Al, Cr, Mn, Fe, Mg, La, Ce, Sr and V, and A is selected from O, F, S or P.

23. (Amended) The method of claim 5 wherein the lithiated transition metal compound is a compound represented by formula:



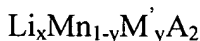
where $1.0 \leq x \leq 1.1$, and A is selected from O, F, S or P.

24. (Amended) The method of claim 5 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq z \leq 0.5$, and A is selected from O, F, S or P.

25. (Amended) The method of claim 5 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq y \leq 0.1$, $0.01 \leq z \leq 0.5$, M' is at least one transition metal or lanthanide metal selected from the group consisting of Al, Cr, Co, Mg, La, Ce, Sr and V, M'' is at least one transition metal or lanthanide metal selected from the group consisting of Al, Cr, Mn, Fe, Mg, La, Ce, Sr and V, and A is selected from O, F, S or P, and B is Ni or Co.

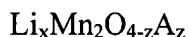
26. (Amended) The method of claim 5 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq y \leq 0.1$, $0.01 \leq z \leq 0.5$, M' is at least one transition metal or lanthanide metal selected from the group consisting of Al, Cr, Co, Mg, La, Ce, Sr and V, M'' is

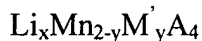
at least one transition metal or lanthanide metal selected from the group consisting of Al, Cr, Mn, Fe, Mg, La, Ce, Sr and V, and A is selected from O, F, S or P, and B is Ni or Co.

27. (Amended) The method of claim 5 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq z \leq 0.5$, and A is selected from O, F, S or P.

28. (Amended) The method of claim 5 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq y \leq 0.1$, M' is at least one transition metal or lanthanide metal selected from the group consisting of Al, Cr, Mn, Fe, Mg, La, Ce, Sr and V, and A is selected from O, F, S or P.

29. (Amended) The method of claim 1 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, A is selected from O, F, S or P, and B is Ni or Co.

30. (Amended) The method of claim 5 wherein the lithiated transition metal compound is a compound represented by formula:



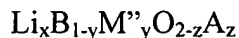
where $1.0 \leq x \leq 1.1$, $0.01 \leq z \leq 0.5$, A is selected from O, F, S or P, and B is Ni or Co.

31. (Amended) The method of claim 5 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq y \leq 0.1$, M'' is at least one transition metal or lanthanide metal selected from the group consisting of Al, Cr, Mn, Fe, Mg, La, Ce, Sr and V, A is selected from O, F, S or P, and B is Ni or Co.

32. (Amended) The method of claim 5 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq y \leq 0.1$, $0.01 \leq z \leq 0.5$, M'' is at least one transition metal or lanthanide metal selected from the group consisting of Al, Cr, Mn, Fe, Mg, La, Ce, Sr and V, A is selected from O, F, S or P, and B is Ni or Co.

33. (Amended) The method of claim 5 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, and A is selected from O, F, S or P.

34. (Amended) The method of claim 5 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq z \leq 0.5$, and A is selected from O, F, S or P.

35. (Amended) The method of claim 5 wherein the lithiated transition metal compound is a compound represented by formula:



where $1.0 \leq x \leq 1.1$, $0.01 \leq y \leq 0.1$, $0.01 \leq z \leq 0.5$, M'' is at least one transition metal or lanthanide metal selected from the group consisting of Al, Cr, Mn, Fe, Mg, La, Ce, Sr and V, and A is selected from O, F, S or P.